Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.- 18. Cancelled

19. (currently amended) A homogenous assay method for directly detecting a donor-product produced in a group transfer reaction in the presence of a donor molecule, the method comprising the steps of:

a) reacting a donor molecule~~, comprising a nucleotide attached to a covalent adduct, X~~ which is adenosine triphosphate (ATP), with an acceptor in the presence of a catalytically active enzyme to form the donor-product~~, an ADP,~~ which is adenosine diphosphate (ADP) and an acceptor-~~X~~ phosphate, such that the ~~donor molecule~~ ATP is partially consumed;

b) combining the ~~donor product~~ ADP produced in a group transfer reaction with a tracer and ~~a macromolecule~~ an antibody to provide a reaction mixture, the ~~macromolecule~~ antibody being specific for the ~~donor product~~ ADP, the tracer comprising the ~~donor product~~ ADP conjugated to a fluorophore, and capable of binding to the ~~macromolecule~~ antibody to produce a detectable change in fluorescence polarization~~, wherein the macromolecule is an antibody~~;

c) measuring the fluorescence polarization of the mixture to obtain a measured fluorescence polarization; and

d) comparing the measured fluorescence polarization with a characterized fluorescence polarization value corresponding to a known ~~donor product~~ ADP concentration to directly detect the ~~donor product~~ ADP produced in the group transfer reaction.

20.- 27. Cancelled

28. (currently amended) A homogenous assay method for directly detecting a donor-product produced in a group transfer reaction, the method comprising:

a) reacting a donor molecule~~,~~ which is an adenosine triphosphate (ATP)~~,~~ with ~~an acceptor,~~ a polypeptide, in the presence of ~~a catalytically active enzyme,~~ a kinase;

b) forming the donor-product~~,~~ which is an adenosine diphosphate (ADP) and ~~an acceptor-X,~~ a phosphorylated polypeptide;

c) contacting the ADP with a first complex comprising an antibody, that specifically recognizes the ADP and ~~a detectable tag,~~ a tracer~~,~~ capable of producing an observable;

d) competitively displacing the ~~detectable tag~~ tracer of the first complex by the ~~donor-product,~~ ADP, to generate a second complex, ADP-antibody complex and a displaced ~~detectable tag, a~~ tracer, to directly detect the donor-product in the kinase reaction; and

e) detecting a change in the observable produced by the tracer in the first complex bound to the antibody and the tracer.

29. (currently amended) A homogenous assay method for directly detecting a donor-product produced in a group transfer reaction, the method comprising the steps of:

a) ~~combining the donor-product, an adenosine diphosphate (ADP), produced in the group transfer reaction, a kinase reaction, with a tracer and an antibody to provide a reaction mixture, the antibody being specific for the ADP, the tracer comprising the ADP conjugated to a fluorophore and capable of binding to the antibody to produce a detectable change in fluorescence polarization~~

providing a reaction mixture having products of the group transfer reaction, a tracer and an antibody, wherein the reaction is a kinase reaction, wherein the products of the reaction include the donor-product which is an adenosine diphosphate (ADP), in the presence of a donor molecule which is an adenosine triphosphate (ATP), wherein the antibody is specific for the ADP, and wherein the tracer comprises the ADP conjugated to a fluorophore and is capable of binding to the antibody to produce a detectable change in fluorescence polarization;

b) measuring the fluorescence polarization of the reaction mixture to obtain a measured fluorescence polarization; and

c) comparing the measured fluorescence polarization with a characterized fluorescence polarization value corresponding to a known ADP concentration to directly detect the ADP produced in the kinase reaction.

30.-33. Cancelled.